

# UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/833,898	04/12/2001	Kevin L. Payton	10283.3801	2060
22235	7590 07/14/2003			
MALIN HALEY AND DIMAGGIO, PA			EXAMINER	
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	EWS AVENUE ERDALE, FL 33316		WILSON, JOHN J	
			ART UNIT	PAPER NUMBER
			3732	
			DATE MAILED: 07/14/2003	12

Please find below and/or attached an Office communication concerning this application or proceeding.

		_	$ \Omega$				
•		Application No.	Applicant(s)				
Office Action Summary		09/833,898	PAYTON, KEVIN L.				
		Examin r	Art Unit				
		John J. Wilson	3732				
Period f r	The MAILING DATE of this communication app Reply	ears on the cover sheet with the c	orrespondence address				
THE MA - Extension after SI) - If the pe - If NO pe - Failure to - Any repl	RTENED STATUTORY PERIOD FOR REPLY ALLING DATE OF THIS COMMUNICATION. ons of time may be available under the provisions of 37 CFR 1.13 (6) MONTHS from the mailing date of this communication. riod for reply specified above is less than thirty (30) days, a reply eriod for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, y received by the Office later than three months after the mailing patent term adjustment. See 37 CFR 1.704(b).	66(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days till apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
	Responsive to communication(s) filed on <i>06 J</i>	une 2003					
<i>'</i> —		s action is non-final.					
•	, <del>-</del>		osecution as to the ments is				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims							
•	laim(s) 1 and 4-14 is/are pending in the appli	cation.					
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1 and 4-14</u> is/are rejected.							
•	7) Claim(s)is/are objected to.						
	laim(s) are subject to restriction and/or	r election requirement.					
Application	n Papers						
9)[] Th	e specification is objected to by the Examiner	Γ,					
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
Priority un	der 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) <u></u>	All b) ☐ Some * c) ☐ None of:						
1	. Certified copies of the priority documents	s have been received.					
2	. Certified copies of the priority documents	s have been received in Applicati	on No				
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
14) 🔲 Ac	knowledgment is made of a claim for domestic	c priority under 35 U.S.C. § 119(	e) (to a provisional application).				
a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment(s	9)		•				
2) Notice	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) tion Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal	y (PTO-413) Paper No(s) · Patent Application (PTO-152)				
J.S. Patent and Trad	emark Office		Data (Danas No. 45				

Application/Control Number: 09/833,898

Art Unit: 3732

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 11, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeVincenzo et al (5853291). DeVincenzo (291) shows a subperiosteal system comprising a small thin body 66, that is shown in a substantially flat embodiment in Figs. 14, 15, 18 and 19, having apertures for a bone fastener, column 3, line 36, a rigidly attached wire guide 72, column 7, lines 40-49, and a central member connecting the body to the wire guide as shown, Fig. 19. It would be obvious to use plural fasteners in view of the showing of a plurality of apertures. As to claim 13, see malleable, column 1, line 67.

Claims 1-3, 7-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeVincenzo et al (5853291) in view of DeVincenzo (5938437) and Kanomi et al (5921774). DeVincenzo (291) shows a subperiosteal system comprising a small thin body 66, that is shown in a substantially flat embodiment in Figs. 14, 15, 18 and 19, having apertures for a bone fastener, column 3, line 36, wire guide 72, column 7, lines 40-49, and a central member connecting the body to the wire guide as shown, Fig. 19. DeVincenzo (291) does not show a bendable central member. DeVincenzo

(437) shows a bendable central member 15, column 3, line 1. It would be obvious to one of ordinary skill in the art to modify DeVincenzo (291) to include a bendable portion as shown by DeVincenzo (437) in order to adjust the device to fit the individual patient in order to apply the desired forces to the teeth. The claim language limiting the size of the fastener to one that anchors the body "securely" to the bone is very broad in scope and depends on the manner and the bone that the device is used with. In view of this, it is held that the anchors shown by DeVincenzo (291) will securely anchor the body and/or that the general size of the anchors are an obvious matter of choice in the degree of a known parameter to the skilled artisan. The size is further held to not be critical as evidenced by the disclosure of the present application which fails to disclose a size for the anchor which will function as claimed. The above combination does not show a bracket that is intended to be used with a tension band. It is well known in the art to attach tension bands to brackets. Kanomi shows a tension band bracket 25, 34. It would be obvious to one of ordinary skill in the art to modify the above combination to include the use of a bracket with tension bands as shown by Kanomi in order to apply the desired forces to the teeth. As to claim 2, DeVincenzo (291) shows a guide 72 for an orthodontic wire in Fig. 19, however, does not show the wire connected to first and second orthodontic appliances. DeVincenzo (437) shows first and second orthodontic appliances 2, see Figs. 1 and 2 and an orthodontic wire 1. It would be further obvious to one of ordinary skill in the art to modify DeVincenzo (291) to include two appliances as shown by DeVincenzo (437) in order to apply the desired forces to the teeth. As to claims 7 and 8, the method steps are obvious to one of ordinary skill in the art in view of

the shown structure above. The method steps of periodically adjusting the wire and of removing the appliances are well known method steps in orthodontic treatment, and therefore, are held to be obvious to one of ordinary skill in the art. As to claim 12, DeVincenzo (291) does not show a spring rigidly attached to the appliance for receiving an orthodontic tension band. DeVincenzo (437) shows a prong 3 that is for receiving an elastic thread 10, Fig. 2. It would be obvious to one of ordinary skill in the art to modify DeVincenzo (291) to include using the prong as shown by DeVincenzo (437) in order to apply the desired forces to the teeth.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeVincenzo (5853291) in view of Kanomi et al (5921774). DeVincenzo (291) shows a subperiosteal system comprising a small thin body 66, that is shown in a substantially flat embodiment in Figs. 14, 15, 18 and 19, having apertures for a bone fastener, column 3, line 36, wire guide 72, column 7, lines 40-49, and a central member connecting the body to the wire guide as shown, Fig. 19. DeVincenzo does not show a bracket that is intended to be used with a tension band. It is well known in the art to attach tension bands to brackets. Kanomi shows a tension band bracket 25, 34. It would be obvious to one of ordinary skill in the art to modify the above combination to include the use of a bracket with tension bands as shown by Kanomi in order to apply the desired forces to the teeth.

## Respons to Arguments

Applicant's arguments filed June 6, 2003 have been fully considered but they are not persuasive. Applicant argues that the prior art is a subperiosteal system that works differently from the structure and method present invention. Just as the present invention, the prior art is implanted between the bone and tissue and held by bone fasteners. That the prior art also uses additional structure to encourage overgrowth of bone does not negate the structure that it shows. Applicant's article claims fail to claim any patentable difference in structure, instead, they are directed to the same structure with terminology to imply a different intended use. As such, the actual structure shown is properly met, and the intended use is given no patentable weight. The above combination combines elements that are motivated in view of solving a problem such as a bendable portion or use with brackets and tension bands, all of which would be obvious to use in a method that includes bone integration. Applicant has failed to claim any new or unobvious structure that is specific to and gives life and meaning to the different intended use of not waiting for bone ingrowth or bone overgrowth. Applicant claims fasteners that hold the plate securely, however, there is not structure claimed nor disclosed that differentiates these fasteners from those shown by the prior art. Merely using a known structure in a new manner does not patentable distinguish there over. In the method claims, applicant does not specifically claim the argued different use of using the anchor which is to be used sooner in the process then the method of the prior art, and therefore, this argument is not given weight.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to John Wilson at telephone number (703) 308-2699.

John J. Wilson Primary Examiner Art Unit 3732

1 galler

jjw July 9, 2003

Fax (703) 308-2708

Work Schedule: Monday to Friday - Flex Time